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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,299	11/20/2003	Richard Louis Arndt	AUS920030190US1	9780
35525	7590	02/22/2008		
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER OSMAN, RAMY M	
			ART UNIT 2157	PAPER NUMBER
			NOTIFICATION DATE 02/22/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeeiplaw.com

# Office Action Summary

Application No.

10/718,299

Applicant(s)

ARNDT ET AL.

Examiner

RAMY M. OSMAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                                  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

## DETAILED ACTION

### *Status of Claims*

1. This action is responsive to amendment filed on December 5, 2007, where Applicant amended claims 1,8,9,16,17,24. Claims 1-24 are pending.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1-24 have been considered and are persuasive. However, the arguments are moot in view of the new ground(s) of rejections presented below.

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 9-16 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite "computer readable medium". Paragraph 90 of Applicants disclosure states that "computer readable medium" includes "transmission-type media" which includes, among other things, RF and wave transmissions. Therefore, it is clear that the scope of the claimed "computer readable medium" is intended to cover transmission media which includes signals. This does not fall within any of the statutory categories and is therefore not patentable subject matter. **See MPEP Chapter 2106 Section IV.B.¶4 and Chapter 2106.01**

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5. Claims 17-24 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite a "data processing system". Paragraph 65 of Applicants disclosure mentions that firmware/software can be used to implement the invention. Therefore, it is possible that the claims are directed to a program per se. Claiming a program is non statutory because it is not a process occurring as a result of executing the stored program. It is also not a machine programmed to operate in accordance with the stored program, nor is it a manufacture structurally and functionally interconnected with the stored program in a manner which enables the program to act as a computer component and realize its functionality. It is also clearly not a composition of matter and therefore does not fall within any of the statutory categories. **See MPEP Chapter 2106.01 Section I.**

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1,9,17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, for example, on line 7 recites "checking a multicast table ... to determine if a matching entry exists". However, this limitation is incomplete because it is unclear what exactly are the elements being compared that would allow a determination of a match to be made.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1-7,9-15,17-23 rejected under 35 U.S.C. 102(b) as being anticipated by Infiniband Trade Association (Infiniband Architecture Specification Volume 1, 11/6/2002).**

10. In reference to claim 1, Infiniband teaches a method in a logically partitioned data processing system, the method comprising:

receiving a packet in a host channel adapter for a system area network (pg 108 lines 16-25), wherein the host channel adapter is shared among a plurality of logical partitions within the logically partitioned data processing system, and wherein each logical partition within the plurality of logical partitions includes a logical host channel adapter having a logical port (pg 474 lines 18-42 and pgs 903-904);

checking a multicast table in the host channel adapter to determine if a matching entry exists, wherein the multicast table contains information on multicast groups to which logical ports of logical host channel adapters belong (pg 476 line 31 – pg 477 line 15 and pg 908); and

forwarding the packet to trusted software in response to a determination that the packet is intended for multicasting and that no matching entry exists in the multicast table, wherein the trusted software forwards the packet to one or more appropriate recipient logical partitions within the plurality of logical partitions (pg 417 line 19 – pg 418 line 37).

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11. In reference to claim 2, Infiniband teaches the method of claim 1, wherein at least one protocol checking operation of the host channel adapter is bypassed for the purpose of forwarding the packet to the trusted software (pg 416).

12. In reference to claim 3, Infiniband teaches the method of claim 2, wherein the trusted software completes the at least one protocol checking operation on the forwarded packet (pg 106 lines 11-18).

13. In reference to claim 4, Infiniband teaches the method of claim 3, wherein the at least one protocol checking operation includes at least one of queue key (Q\_key) checking and partition key (P\_key) checking (pg 94 lines 9-35).

14. In reference to claim 5, Infiniband teaches the method of claim 1, wherein the trusted software includes at least one of a hypervisor and an operating system (pg 106 lines 11-18).

15. In reference to claim 6, Infiniband teaches the method of claim 1, wherein the packet is received by the host channel adapter from a system area network fabric (pg 107 lines 5-14).

16. In reference to claim 7, Infiniband teaches the method of claim 1, wherein the packet is received by the host channel adapter from an application on a host associated with the host channel adapter and the packet is received by the host channel adapter for the purpose of transmitting the packet over the system area network (pg 906).

17. In reference to claims 9-15, these are computer program product claims that correspond to the method claims of claims 1-7. Therefore, claims 9-15 are rejected based upon the same rationale as given for claims 1-7 above.

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18. In reference to claims 17-23, these are claims that correspond to the method claims of claims 1-7. Therefore, claims 17-23 are rejected based upon the same rationale as given for claims 1-7 above.

*Allowable Subject Matter*

19. Claims 8,16,24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter: Prior art references found to be pertinent to Applicants disclosure (such as Patent Publication Numbers: 20030236900 and 20020198927), either only teach minor aspects of the invention or only teach the general environment of the invention. The collective prior art, either singly or in combination, do not teach the claim limitations. The particular novel feature of Applicants invention is (as stated in the claims), wherein in response to the host channel adapter's receiving the packet and in response to an associated Force Out bit in a work queue element being set to a first value, the host channel adapter attempts to transmit the packet to local logical host channel adapters, and in response to the channel adapter's receiving the packet and in response to the associated Force Out bit in the work queue element being set to a second value that is distinct from the first value, the host channel adapter transmits the packet over a system area network fabric.

*Conclusion*

21. The above rejections are based upon the broadest reasonable interpretation of the claims. Applicant is advised that the specified citations of the relied upon prior art, in the above rejections, are only representative of the teachings of the prior art, and that any other supportive sections within the entirety of the reference (including any figures, incorporation by references, claims and/or priority documents) is implied as being applied to teach the scope of the claims.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Form 892.

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **RAMY M. OSMAN** whose telephone number is (571)272-4008. The examiner can normally be reached on M-F 9-5.




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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RMO  
February 16, 2008

  
ARIO ETIENNE  
SUPERVISOR PATENT EXAMINER  
TECHNOLOGY CENTER